

May 25, 2004

Mr. Jeff Forbes
Vice President, Operations ANO
Entergy Operations, Inc.
1448 S. R. 333
Russellville, AR 72801

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
ARKANSAS NUCLEAR ONE, UNIT 2, LICENSE RENEWAL APPLICATION
(TAC NO. MB8402)

Dear Mr. Forbes:

The U.S. Nuclear Regulatory Commission (NRC) is reviewing a license renewal application (LRA) submitted by Entergy Operators Inc. (Entergy or the applicant) dated October 14, 2003 for the renewal of the operating licenses for Arkansas Nuclear One, Unit 2, pursuant to Title 10 *Code of Federal Regulations* Part 54 (10 CFR Part 54). The NRC staff has identified, in the enclosure, areas where additional information is needed to complete the review. Specifically, the enclosed requests for additional information (RAIs) are from Section 2.5 Scoping and Screening Results: Electrical and Instrumentation Controls and Section 3.3 Auxiliary Systems. These RAIs have been discussed with your staff.

Your response to these RAIs is requested within 30 days from receipt of this letter. If you have any questions, please contact me at (301) 415-1124 or e-mail gxs@nrc.gov.

Sincerely,

/RA/

Gregory F. Suber, Project Manager
License Renewal Section A
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No.: 50-368

Enclosure: As stated

cc w/encl: See next page

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DATE:	5/21/04	5/25/04	5/25/04

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**REQUEST FOR ADDITIONAL INFORMATION OF
SCOPING AND SCREENING RESULTS FOR ELECTRICAL
AND INSTRUMENTATION CONTROLS
ARKANSAS NUCLEAR ONE - UNIT 2
LICENSE RENEWAL APPLICATION (TAC NO. MB8402)**

Section 2.5 Electrical and Instrumentation Controls

RAI 2.5-1

Section 2.1, Table 2.1-1 of the license renewal application (LRA) indicates that the following components are within the scope of license renewal:

- a) Uninsulated ground conductors (e.g., grounding rods, buried ground cables and cathodic protection)
- b) Phase bus[es] (e.g., isolated-phase bus, segregated and non-segregated phase bus)
- c) Transmission conductors
- d) Electrical portions of electrical and I&C penetration assemblies (e.g., electrical penetration assembly cables and connections)

However, per Table 3.6.2-1, no aging effect and no aging management program is identified for these components. Please provide a detailed description as to why an aging management review (AMR) is not required.

RAI 2.5-2

Interim Staff Guidance-2 (ISG-2), NRC Staff Position on the License Renewal Rule (10 CFR 54.4) as it relates to the Station Blackout Rule (10 CFR 50.63), states, in part, that "The offsite power systems of U.S. nuclear power plants consist of a transmission system (grid) component that provides a source of power and a plant system component that connects that power source to a plant's onsite electrical distribution system which powers safety equipment. For the purpose of the license renewal rule, the staff has determined that the plant system portion of the offsite power system that is used to connect the plant to the offsite power source should be included within the scope of the rule." Provide a detailed description (including a one-line drawing showing the path of recovery) of Arkansas Nuclear One, Unit 2's recovery path and discuss how the recovery path is in compliance with ISG-2. The discussion should also include restoration of power to each 4.16 Kv safety bus. Furthermore, on the one-line drawing, please indicate the portions of the recovery path that are overhead or underground.

RAI 2.5-3

Section 4.4 of the LRA states "...in-scope EQ components will continue to perform their intended function(s) for the period of extended operation...." The applicant is requested to define the term "in-scope EQ."

Auxiliary Systems

RAI 3.3-6

LRA Tables 3.3.2-3, 3.3.2-4 and 3.3.2-7 identify carbon steel bolting in auxiliary systems as subject to loss of mechanical closure integrity and the bolting and torquing activities AMP is credited with managing this aging effect. Note E is applicable to these components and this note states that this is consistent with NUREG-1801 material, environment, and aging effect but a different aging management program is credited. LRA AMP B.1.2, bolting and torquing activities, indicates that this program relies on industry recommendations for comprehensive bolting maintenance based on EPRI TR-104213. EPRI report TR-104213 is also referenced in the GALL XI.M18 bolting integrity AMP. For those auxiliary systems with carbon steel bolting associated with Note E, clarify if the credited bolting and torquing activities combined with other inspections required by the system walkdown are consistent with the GALL AMP XI.M18 bolting integrity, including periodic inspection of closure bolting for indication of loss of preload with subsequent loss of mechanical closure integrity. If not consistent, identify specific exceptions to the GALL AMP and the technical justification for the exceptions.

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RLEP RF

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